

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

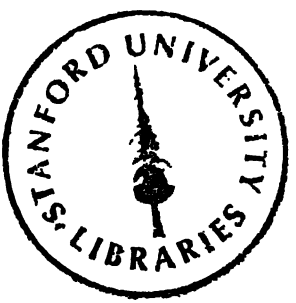
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

917.9468
S548BU
SAL

SHEPARDSON

THE BUTTERFLY TREES

SEMINOLE COUNTY PUBLIC LIBRARIES

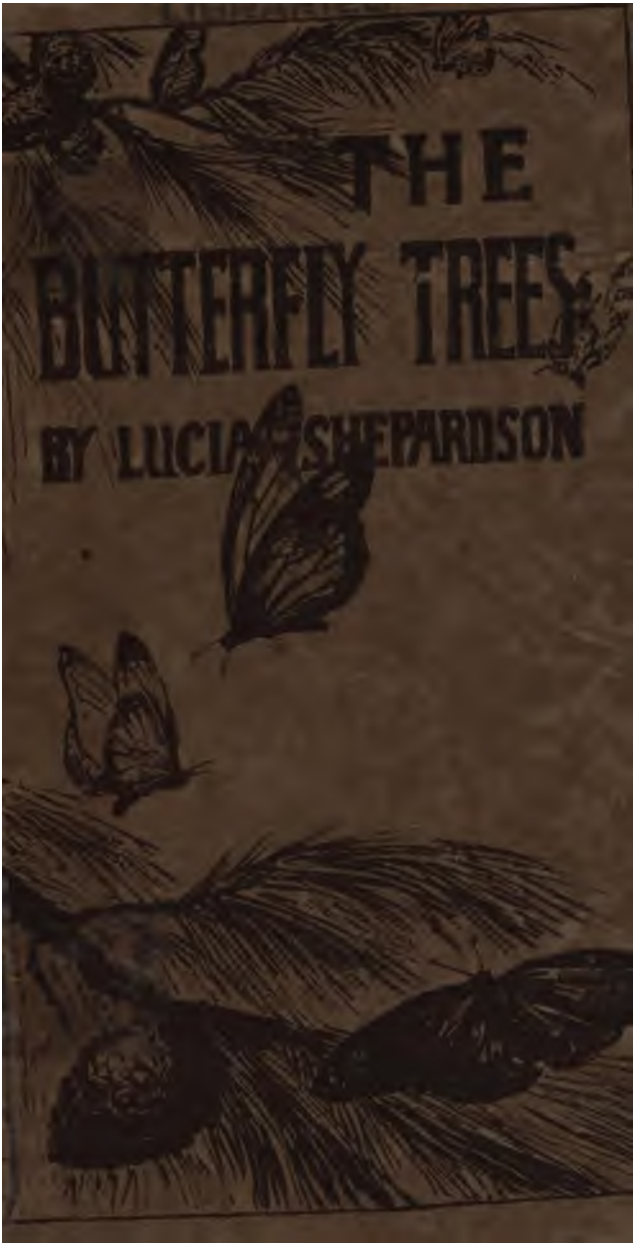

STANFORD UNIVERSITY
LIBRARIES





THE BUTTERFLY TREES

BY LUCIA SHEPARDSON





GIFT OF

Frank W. Weymouth

To Father

with love and

Christmas greetings

from

Alice and Frank.



THE BUTTERFLY TREES

BY
LUCIA SHEPARDSON

SAN FRANCISCO
THE JAMES H. BARRY COMPANY
1914

917.9468
S548b

COPYRIGHT, 1914,
BY
LUCIA SHEPARDSON.



Photo by A. C. Warner

THE ROAD TO THE BUTTERFLY TREES

The Butterfly Trees

For several reasons is the Monterey peninsula famed among the folk who have come to California for a time and returned to their own land. There is beauty of scenery, there is evenness of climate, to charm the wayfarer and cause him to remember. And more of the vanishing Spanish element may yet be found in old Monterey, with its adobes and its legends, than anywhere else the length of the long State. But for a fourth good reason, and the one least known, does it stand alone

of the places of the Pacific coast. To it each autumn comes a pilgrimage, the members of which number tens of thousands of pilgrims, drawn hither to seek shelter from the cold and the frost of winter, which to them would mean death. They are not men, they are not beasts, nor are they birds, these travellers of long distances. They are butterflies.

It is one of the most interesting things to be seen the world over, this vast annual gathering of these fragile creatures. Indeed, it is almost an incredible thing, unless one has with one's own eyes beheld it. It is not only this vicinity to which they come, but one especial group of

trees. What instinct brings them here, year after year, the descendants each season of those who came the previous fall, no man, not even the wisest of the scientists, can say. About three miles from the historic town which was the first capital of California, upon the southermost corner of that blue crescent so often likened to Naples, lies another town, called Pacific Grove, the second half of the name derived from the splendid forests of Pinus Insignis which cover the entire peninsula. There is a lighthouse out beyond the village, and the road to it is lined on either side with unusually beautiful pines. It is upon a certain group of

these trees, beside this road, that the butterflies live all winter.

They are uniformly of the same species, and will readily be recognized as the Monarch, or Anosia plexippus. Very striking are their wide reddish-brown wings, with the broad black borders and the two rows of white spots along the outer edges. During the months between mid-autumn and mid-spring, countless numbers of them flit all day about the flowers of the gardens of the town, but the air is so warm and butterflies seem such natural complements of plants in bloom, that at first a person does not particularly notice them. After a time, however, it is realized



Photo Copyright 1914 by A. C. Warner

BUTTERFLIES ON A PINE BOUGH

that this is winter, and that butterflies are not supposed to be abroad in winter. Then it is that the marvel of it dawns upon the beholder, and his keen interest is very certain to be aroused. He will in all likelihood spend pleasant days in observing the Monarchs and becoming acquainted with their habits,—for they do have habits, very firm and fixed ones, as will later be seen.

Although they alight on every plant and shrub and tree that blossoms in the neighborhood, the nearer the observer comes to their own home trees, the greater their numbers, until a group of pines is seen, the branches of which are literally

covered with the insects. This is their chosen abiding place, and has been, past the memory of man. They hang in masses from the boughs, thousands upon thousands. They are absolutely countless, and the appearance of the needle-clad branches is transformed into the semblance of thickly-leafed growth, with all the leaves turned brown. On a dark and cloudy day, when the citizens of this remarkable colony are at rest, it is not too easy a matter for a stranger to find them, since they then hang motionless, with the bright side of their wings folded inward and the dull tawny side outward, forming little or no contrast

with the brown bark of the trees and melting in with the dull green of the needles, a marked instance of protective coloring. They do not seem to care for oaks at all, although there are many large specimens near by. It may be that there is something about this particular species of pine which attracts them; it is found nowhere else on the coast, or in fact, in the whole world. Or it might be possible that the combination of pines, sheltered climate, and perennial flowers influenced them long ago to winter at this place; although they first were known here years before the town of Pacific Grove was founded and gar-

dens were cultivated, the sand verbenas and lilacs and other wild things native to this region have been blossoming as long as the pines have been growing.

They arrive in October, usually about the second week, and they remain until March, as regularly, as surely, as the seasons change. The earliest authentic information as to this annual migration dates back fifty years, when the Monarchs were seen upon the pines just as they are to-day. Previous to that, no mention has been found of this interesting phenomenon, for such it may truly be called. The early Spanish chronicles and traditions make no mention of it, although Monterey,

a scant three miles distant, was gay with life when the last century came in; but it is easy to understand how the caballeros, riding at top speed, as they usually did on their occasional jaunts through the woods, did not glimpse the butterfly trees. Many a person on foot, and searching particularly for them, has missed them too. Also, many a person has missed them without ever dreaming of that which he unwittingly was passing by. For it is a curious fact that this wonder is, and has always been, comparatively little known. The early voyagers and scientists, thoroughly as many of them explored this region, and keen though their

eyes must have been to discover all the things they did, make no mention of it in any place among their various writings,—even David Douglas, the world-famed botanist, and the keenest-eyed of all the strangers who came here, is silent regarding it. Yet it is easy to understand, after all, for unless one knows exactly what to look for, such as the appearance of the insects when at rest upon the branches, and the precise location of the trees, it is next to impossible to find them. And there was no one then to point them out to comers from far lands.

One summer, two or three seasons ago, an unusual amount of interest was for some reason

manifested in this phenomenon, and the following autumn, when the pines on the light-house road became brown with the small tourists, for a month or more, particularly on Sunday afternoons, there was a procession of sightseers wending their way out to the trees. The poor butterflies, alas, fared rather badly as a result of this suddenly aroused public attention. Many spectators wished to see those in flight that were at rest upon the branches, so the delicate creatures were pelted with sticks and stones and cones until hundreds of them had crushed and broken wings. But while this disturbed them sadly, it did not drive them away, and in six

weeks or so, when the interest in them slackened a bit, they were left to their usual quiet solitude.

Of all living things, butterflies, from the classical to the present-day writers, have ever been cited as an epitome of joyous living, and freedom from responsibility of any sort. But they are not the idlers that they seem, nor are they free from a systematic scheme of living. The Anosiæ not only return to this same place each season, but once arrived, they adhere to a fixed routine which has not varied in observations extending over a period of sixteen years. It takes three or four weeks for them to get settled after arriv-

ing. When they first come, in October, seemingly not in the least fatigued by their travels, they appear transported with joy at having attained their destination. They flutter madly about in the warm sunshine in twos and threes or larger groups, playing like birds in their flight. Sometimes they ascend to a considerable height in the air, in pure ecstasy of living, apparently. The best time to watch them is when they are in this unsettled state, because a better idea can then be obtained of their great numbers. At this season, too, they rest thickly upon some of the smaller trees in the vicinity, upon the way-

side weeds and vines, and if you approach very quietly and slowly, and there is no wind, you can hear the faint rustling of countless wings, which, closed, bear that odd resemblance to dead leaves. Let them be disturbed ever so slightly, however, and the wings unfold, the likeness to leaves instantly vanishing as they rise in the air, the most exquisite of bright and evanescent clouds.

By the end of the first week in November, they are systematically established for their long stay. No more are they joyous vagrants, lighting with careless abandon npon any shrub or flower that is near. They may now be seen only

upon the high boughs of their especial pines, and here they remain. Many of them go forth in search of honey each day, but they do not leave their resting place in swarms, and as has been said, they are not apt to attract the attention as they skim over the gardens unless the time of year is recalled. By far the greater majority are always on their trees,—it would almost seem that they take turns in procuring food. Those which are abroad do not linger away at nightfall, but return when the day is done, like homing birds. It is a pretty sight, just before sunset, a brown butterfly here, and there another, and yonder yet others, some of them

loitering for a last taste of honey, but not for long, as they wend their way on their slight wings out toward Point Pinos and the place they love. Sometimes on very warm days, when goodly numbers of them have been honey-seeking and about four or five o'clock in the afternoon have just returned for the night, they do not fold their wings at once in rest, but flit about like birds from bough to bough, picking a likely twig or pine needle whereon to sleep, and the late sun, slanting through the forest, glints upon their red-brown surfaces until the branches are ruddy with warm and pulsing color. They are beautiful always to look

upon, these dainty creatures, but this is the time of all the day, I think, when they are quite most lovely.

They are very hardy, few which have died being found underneath the trees at any time. They are not affected by the occasional light frosts of the vicinity, nor are they harmed by storms; during inclement weather they move from the tips of the limbs close up to the mossy trunks, where they remain in perfect safety. None of them venture forth when it is raining, which tends to prove that they are able to do without sustenance for some little time. One of the most severe storms ever known on the coast oc-

curred this winter, when for three weeks there was not a sunny day, and most of this period it rained incessantly. Small opportunity was there for the Monarchs to gather honey. It would be a natural supposition that many of them perished from exposure and hunger, but such was far from the case. Not a dead butterfly was seen, and when the sun shone forth at last, how they spread their tiny pinions in happy flight, almost as excited as when they first arrived in October. They flocked to the warm grass, they thronged the blossoming pine boughs everywhere, they settled in clouds upon acacia trees feathery with

bloom. Little cared they for the storms that were past.

They are undisturbed by the travel on the nearby road, not even by the countless automobiles which roll along the neighboring boulevard. Only once have they taken exception to any disturbing factor, and this was when some heavy blasting was being done during the winter months on the road near their trees. Then, indeed, were they aroused. They straightway took their departure, and quite disappeared from their winter home and from the entire peninsula. There is no means of knowing where they then sought shelter, but most of them must have perished, wher-

ever they were, since very few were seen in their accustomed haunts the following winter. Two years later, however, they appeared in much the same swarms as before.

They are unmolested by birds of any sort, even the alert and rapacious jays, with which these woods abound, letting them severely alone. This is because they are what are known as protected insects. The entire genus Anosia, of which there are the two species, Anosia plexippus and Anosia berenice, belong in this category; owing to the character of the plants upon which the larvæ feed, they are provided with secretions which render them distasteful to possi-



Photo by A. C. Warner

THE MONARCH



ble enemies. The Anosiæ are often called the Milkweed butterflies, because the young feed largely upon the different varieties of milkweed.

About the first of March they begin to disappear. A few at a time, they vanish from the pines and from the gardens, and by the end of the month they are almost entirely gone. Just before leaving they are much more wild than on any previous occasion; ordinarily they are remarkably tame, and it is not uncommon for one to alight upon a person standing among or near flowers—they can easily be picked up wherever encountered. But he who would touch one in March must be agile in-

deed; the fever of migration is upon them. Their wings are faded now, and many of them broken, a sharp contrast to their lovely perfection when first they come, in the autumn. This would tend to carry out the theory that the young are raised during the summer. They do not leave their home in a body, but very gradually their numbers decrease; on the other hand, they appear in the autumn in a relatively much shorter space of time. For some reason there are very few butterflies of any variety in this region during the summer, and almost never is a Monarch seen; there are surely flowers enough to attract them, but

they seem to prefer other districts.

In all probability, it is many scores of years since the Anosiæ first began to seek this peninsula upon the advent of cold weather elsewhere. Their annual gathering here confirms a theory long held by entomologists concerning them. Careful and continued study of their habits has led scientists for some time past to believe that upon the advent of the cold season they migrate to warmer localities, where they live throughout the winter in all the glory of their winged beauty. It is well known that they do not hibernate, which differentiates them radically from the

lesser members of their kind. One of their most noted characteristics, mentioned by nearly all authorities on butterflies, is their tendency at the end of summer to gather in great swarms, as if preparing for a long flight. At such times they are found clinging in masses upon low trees and shrubs, just as they cling to the pines during their long sojourn in the Monterey woods, but as yet the latter place is the only known spot where they remain thus assembled for any length of time, their gatherings which have been observed elsewhere being only temporary, a day or two in duration at the longest. They fly high and strongly,



Photo by A. C. Warner

THE BUTTERFLY TREES



more like birds than insects, and they are known to be great travelers. It is presumed that those which are in the eastern and middle-western states go to the south during the cold weather, while those which winter near Pacific Grove come from a large part of the country lying west of the Rocky mountains. There is one place where they may be seen each autumn on the wing, a flight so great that it takes a day for them to pass a given point. This is in a pass of the Siskiyou mountains, about a hundred miles west of the railroad. Here, in the latter part of September, a long stream of them travels down through the hills

from the north,—the forest rangers see them every year. They fly a little below the tree tops, a thin and fluttering band about fifty feet wide. Their progress is steady and unwavering and they keep to an unerring course, evidently with a fixed destination in view. They never loiter, or turn aside to rest, and not one is seen in the surrounding woods off their line of flight; there is something almost pathetic in the sight, unusual and charming though it is—they are so small, so weak, so defenceless, as they traverse the deep still forest, one cannot but wonder what instinct it is that impels them to travel on such long, long jour-



neys, and how far they must go before they may fold their wings. This pass is four hundred and fifty miles or more from Pacific Grove, yet it is not too much to suppose that many of those that come to that winter resort have found their way there from the northern country. There are many other instances where they are seen far from a resting place, accounts being frequently found of vessels, miles from land, which encounter swarms of the Monarchs, all flying in one direction, evidently on their way to some particular spot. So it is seen that these great migrations pertain as much to their

existence as to that of the birds of passage.

Where they come from, we do not know, or whither they journey when they go away, the little brown visitors that come each October to the trees in the pine forest. Their annual presence here is but a fresh token to the wise people of this world that the ways of Nature, provident for her children, are past the understanding of man.

917.9468
S548bu

35

Stanford University
Stanford, Califo

...t others may
it as soon as
not la... ...an the date due






BOND


3 6105 Geo USS
STANFORD UNIVERS
STANFORD AUXILI
STANFORD, CALIFORN
(650) 723-
salcirc@sulmail.s
All books are subj
DATE D

